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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,024	10/28/2003	Daniel Edward Bowen III	DN2001-163D01	4271

7590 10/06/2005

The Goodyear Tire & Rubber Company
Patent & Trademark Department - D/823
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Akron, OH 44316-0001

EXAMINER

CHOI, LING SIU

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/695,024

Applicant(s)

BOWEN ET AL.

Examiner

Ling-Siu Choi

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7 is/are rejected.
- 7) ☒ Claim(s) 4-6 and 8-20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>08/19/05</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. This Application is a Division of US Application No. 10/222,739, filed August 16, 2002. Claims 1-20 are now pending, wherein claims 1, 2, and 3 are independent ones.

Claim Objections

2. Claims 3, 8 and 12-17 are objected to because of the following informalities:

Claim 3, lines 15-18, "formula (2) wherein n represents the integer 1 or the integer 2 wherein R* represents a hydrogen atom wherein Y represents an oxygen atom wherein Z represents the moiety C(R)R' " is suggested to be changed to --formula (2), wherein n represents the integer 1 or the integer 2; R* represents a hydrogen atom; Y represents an oxygen atom; and Z represents the moiety C(R)R' --;

Claim 8, lines 16 and 21 "wherein m in equal" is suggested to be changed to --wherein m is equal--;

Claims 12-17, lines 2-3, "wherein at least one of the members selected from the group consisting of R, R', and R" is a hydroxy groups" is suggested to be changed to --wherein at least one of R, R', and R" is a hydroxy group--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

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3. **The following is a quotation of the second paragraph of 35 U.S.C. 112:**

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2, 3, and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2, the symbols of R, R', R'', Y, and Z set in the formula causes indefiniteness because they are not defined.

Claim 3, Formula 4, when Y is C(R)R', the monomer represented by Formula 4 is not a silyl-**acetal** compound and is different from the compounds represented by Formula I-3 because the acetal is defined as **RO-C(R)₂-OR**.

Claim 13, line 3, the symbol "**R**" causes confusion because claim 13 depends on claim 4, wherein symbol R" is not used in the formula.

Claim Rejections - 35 USC § 102

5. **The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:**

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Ender

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(US 3,287,291).

A modified silane compound consisting of
a silane - 3 or 4 acetal moieties bonded thereto

(summary of claim 1)

Ender discloses an organosilicon compound represented by the formula of $\text{Si}[(\text{OCH}_2)_n\text{OCH}_3]_4$ which includes $\text{Si}(\text{OCH}_2\text{OCH}_3)_4$, $\text{Si}[(\text{OCH}_2)_5\text{OC}_4\text{H}_9]_4$, $\text{Si}(\text{OCH}_2\text{OC}_2\text{H}_5)(\text{OCH}_2\text{OCH}_3)(\text{OCH}_2\text{OCH}_2\text{OC}_2\text{H}_5)(\text{OCH}_2\text{OCH}_2\text{OCH}_3)$, $\text{Si}(\text{OCH}_2\text{OCH}_3)[(\text{OCH}_2)_3\text{OCH}_3][(\text{OCH}_2)_2\text{OCH}_3][(\text{OCH}_2)_4\text{OCH}_3]$ (col. 1, lines 15-20; col. 2, lines 14-26). Thus, the present claim is anticipated by the disclosure of Ender.

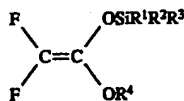
7. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakamura et al. (US 5,973,067).

Nakamura et al. disclose a novel primer composition comprising (A) 100 parts by weight of an alkenyltrialkoxysilane, (B) 0.01-200 parts by weight of a platinum compound, (C) 0.1-100 parts by weight of an organic titanate acid ester, and optionally (D) a solvent, wherein the alkenyltrialkoxysilane can be allyltri(ethoxymethoxy) silane (claims 1 and 3). Thus, the present claim is anticipated by the disclosure of Nakamura et al.

8. Claims 3 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Britton (US 5,618,951).

Britton discloses 2,2-difluoroketene silyl acetal (claim 1, Formula I).

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Thus, the present claims are anticipated by the disclosure of Britton.

Allowable Subject Matter

9. Claims 4-6 and 8-20 are allowable over the closest references: Ender (US 3,287,291), Nakamura et al. (US 5,973,067), and Britton (US 5,618,951).

Ender discloses an organosilicon compound represented by the formula of $\text{Si}[(\text{OCH}_2)_n\text{OCH}_3]_4$ which includes $\text{Si}(\text{OCH}_2\text{OCH}_3)_4$, $\text{Si}[(\text{OCH}_2)_5\text{OC}_4\text{H}_9]_4$, $\text{Si}(\text{OCH}_2\text{OC}_2\text{H}_5)(\text{OCH}_2\text{OCH}_3)(\text{OCH}_2\text{OCH}_2\text{OC}_2\text{H}_5)(\text{OCH}_2\text{OCH}_2\text{OCH}_3)$, $\text{Si}(\text{OCH}_2\text{OCH}_3)[(\text{OCH}_2)_3\text{OCH}_3][(\text{OCH}_2)_2\text{OCH}_3][(\text{OCH}_2)_4\text{OCH}_3]$ (col. 1, lines 15-20; col. 2, lines 14-26). However, Ender does not teach or fairly suggest the claimed modified silane compound.

Nakamura et al. disclose a novel primer composition comprising an alkenyltrialkoxysilane, wherein the alkenyltrialkoxysilane can be allyltrimethoxysilane, allyltriethoxysilane, allyltri(ethoxymethoxy)silane, butenyltrimethoxysilane, hexenyltrimethoxysilane, or hexaenyltriethoxysilane (claims 1 and 3). However, Nakamura et al. do not teach or fairly suggest the claimed modified silane compound.

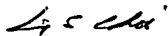
Britton discloses 2,2-difluoroketene silyl acetal (claim 1, Formula I). However, Britton does not teach or fairly suggest the claimed modified silane compound.

Conclusion

10. Claims 4-6 and 8-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ling-Siu Choi whose telephone number is 571-272-1098.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reach on 571-272-1114.



**LING-SUI CHOI
PRIMARY EXAMINER**

September 28, 2005